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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,113	11/25/2003	Peter Zimmermann	GK-OEH-233/500814.20135	4862
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REED SMITH, LLP				
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EXAMINER				
NAGPAUL, JYOTI				
ART UNIT		PAPER NUMBER		
1797				
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07/21/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/722,113

**Applicant(s)**

ZIMMERMANN ET AL.

**Examiner**

JYOTI NAGPAUL

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Amendment filed on April 9, 2008 has been acknowledged. Claims 1-9 are pending.

#### ***Response to Amendment***

Rejection of Claims 1-9 as being unpatentable over Price (US Re.35,010) has been maintained in light of applicants' amendments.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Price (US Re.35,010).

5. As well claims 1, 6 and 8-9 are understood, Price teaches a method of compensating for changes in the flow characteristics of a dispensed fluid to maintain the volume of dispensed fluid at a setpoint. Price further teaches measuring a variable such as viscosity, pressure or temperature that are related to the individuals volumes delivered. Price further teaches correlating measurement/actual values with a control value and a particular dispensing channel. (See Col. 10, Lines 1-38) Price further teaches determining an equilibrium value from the measurement values and a permissible band of tolerance for measurement values. (See Col. 23-38) Price further teaches adjusting the control value up or down for every valve (26) the dispensing channel depending on the determined measurement value is above or below the band of tolerance. (See Col. 10, Lines 23-68) Price further teaches a computer (160) for storing measurement/actual values. (See Claim 1 of Price)

As well claim 1 is understood, Price **fails** to teach more than one nozzle. It would have been obvious to one having ordinary skill in the art to provide more than one nozzle to achieve the predictable result of increasing the efficiency of the overall process.

As well claim 2 is understood, Price **fails** to teach a mean value relating to the control value and the dispensing channel. Price does teach obtaining a control value and a dispensing channel. Price does further teach a controller for inputting commands and setpoint data. Therefore, it would have been obvious to one having ordinary skill in the art to obtain a mean value relating to the control value and the dispensing channel to achieve the predictable results of obtaining precise and controlled flow of fluid through the channel.

As well claims 3 and 4 are understood, Price fails to teach obtaining a median and mean values for measurement values as a equilibration values. Price does teach obtaining a control value and a dispensing channel. Price does further teach a controller for inputting commands and setpoint data. Therefore, it would have been obvious to one having ordinary skill in the art to obtain a mean and median values for equilibration values to achieve the predictable results of precision and controlled flow rate through the channel.

As well claim 5 is understood, Price teaches a value relevant to the target volume as a equilibration value. (See Col.10, Lines 1-20)

As well claim 6 is understood, Price teaches the control value is the opening time for valve in the dispensing channel. (See Claim 1 of Price)

### ***Response to Arguments***

6. Applicant's arguments filed April 9, 2008 have been fully considered but they are not persuasive. Applicant's argue that the FCF, flow compensation factor is not an equilibrium value. Examiner respectfully disagrees. Applicants' merely state an

equilibrium value and do not specify in the claim as to what the equilibrium value is referring to. Therefore, FCF is equivalent to applicants' equilibrium value. Additionally, FLF's are determined from a measured curve of actual flow from the outlet of the nozzle.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI NAGPAUL whose telephone number is (571)272-1273. The examiner can normally be reached on Monday thru Friday (10:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JN

/Brian J. Sines/  
Primary Examiner, Art Unit 1797